

## quick facts on...

# **Mobile Irrigation Labs**

Conserving agricultural and urban water

SEPTEMBER 2003

#### The South Florida Water Management District

is a regional, governmental agency that oversees the water resources in the southern half of the state. It is the oldest and largest of the state's five water management districts.

Our Mission is to manage and protect water resources of the region by balancing and improving water quality, flood control, natural systems, and water supply.

"Since I am very concerned about water overuse and have committed to Xeriscaping, I am very happy to have input and guidelines from an objective, noncommercial source."

Naples resident

Mobile Irrigation Labs (MILs) are a tried-andtrue tool in the water conservation toolbox. They offer a free public service to the agricultural industry, homeowners and other users of water for irrigation.

These specialized labs on wheels evaluate the effectiveness of irrigation systems and then make recommendations on how the system can be made more efficient. The result is a savings in water, energy, time, and money for the user.

MILs are also a great example of the benefits of partnerships. The South Florida Water Management District, in partnership with the Natural Resources Conservation Service and the Soil and Water Conservation Districts, share not only funding but technical expertise and public education programs designed to create an awareness of the benefits of water conservation.

#### **Background**

More and more, water conservation appears on top priority lists for projecting, planning and managing future water needs... not just in south Florida but statewide and globally as well.

In many areas of southern Florida, particularly along our coasts, the tremendous population growth is causing an increased demand on our water supply. Mobile Irrigation Labs play an important role in meeting future water demand.

#### **Benefits of MILs**

Prevention of saltwater intrusion on freshwater systems is just one benefit to improving the efficiency of outdoor water use. MIL evaluations can result in benefits to our natural environment as well as to the local community whether landscape or agricultural.

Irrigation efficiency can result in:

- Reduced runoff of fertilizer and pesticides
- · Reduced soil erosion
- Increased crop production
- Lower energy costs
- Reduced plant diseases

#### **Irrigation Efficiency**

Of all water uses, nearly 90% is used for irrigation purposes, i.e. lawn and agricultural irrigation.



An MIL staffer teaches water conservation to students in Collier County.

#### **Educational Outreach**

MIL staff don't just do water evaluations. Much of their time is also spent educating the public about the need for water conservation. Schools, homeowners/condo associations are just part of the public outreach provided as a free service by the labs. Mobile irrigation lab technicians share their knowledge of wise water use with children in the schools and proper functioning of sprinkler systems to adults in workshops for homeowner associations. This community outreach and education provides preventive benefits for children, helping to shape understanding of the importance





of water conservation and intervenes on inefficient sprinkler systems for large outdoor water users. Actually, each time an evaluation is performed, the educational benefit is multiplied, since many people share their knowledge with their neighbors, families and friends.

#### How Do MILs Work?

Participation in the MIL program is voluntary and free of charge. Individuals or large volume users can request that an MIL team make an on-site inspection of their automatic sprinkler system. The MIL is staffed by trained agricultural researchers who evaluate and make recommendations based on their findings.



Measuring flow on a drip tube irrigation system at a vegetable farm.

## What Do MILs Evaluate?

Depending on the type of evaluation – land-scape or agricultural – MIL staff conduct a series of tests measuring pumping capacities, sprinkler pressures and flow rates, and how evenly water is distributed. Evenness or uniformity is important to efficient landscape or

crop watering. Uneven application can result in some plants receiving too much water and others not enough – an important consideration for commercial growers who use their irrigation system for application of fertilizer and fungicides.

"Your help in figuring out our sprinkler system saved us so much money going from 18,000 to 8,000 gallons of water use."

**Boynton Beach resident** 

"Thank you for your thorough evaluation of our condominium association's irrigation system. You are providing an outstanding service to our community."

Shenandoah Estates, Naples

#### **How Much Water Can Be Saved?**

In the last four years, the eight MILs in south Florida have saved over 3.3 billion gallons per year. This is more than the average 3.2 billion gallons used by the average Florida city of 50,000 people.

#### Where Can MILs Be Found?

Presently eight mobile irrigation labs are in operation in ten counties within the South Florida Water Management District. Ideally, more will be established in the future. The following list shows locations, what they do, and a phone number to contact:

County	Type of Evaluation	Phone Number
Collier Hendry Lee Glades Charlotte	Agricultural and Landscape	239-455-4100
Collier	Landscape	239-455-4100
Lee	Landscape	239-997-7331
Miami-Dade	Agricultural and Landscape	305-242-1288
Palm Beach	Landscape	561-683-2285 x108
Martin	Landscape	772-221-1303
St. Lucie	Landscape	772-461-4546 x5
St. Lucie Martin Okeechobee	Agricultural	772-461-4546 x5

### HOW MUCH WATER CAN A HOMEOWNER SAVE?

Here's an example of a what a typical homeowner could save in money and water by following the recommendations of an MIL evaluation.

A new resident of a housing community in Boynton Beach called the Palm Beach County MIL because his water bills were much higher than those of his neighbors. The MIL evaluation of his landscape irrigation system indicated he needed to buy a better timer for his system and replace several sprinkler

heads. The cost came to about \$200. Based upon his water utility's rate of \$1.54 per 1000 gallons, the money he spent to upgrade the system would be paid back in about 29 months. After that period, he would save about \$7.00 a month on his water bill and would save 4,500 gallons of water per month.



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#### SERVICE CENTERS

Big Cypress Basin 239-597-1505 Broward 954-713-3200 Florida Keys 305-853-3219 or 800-464-5067 Lower West Coast 239-338-2929 or 800-248-1201 Martin/St. Lucie 772-223-2600 or 800-250-4100 Miami/Dade 305-377-7274 or 800-250-4300 Okeechobee 863-462-5260 or 800-250-4200 Orlando 407-858-6100 or 800-250-4250